T-1

TUBE CONDENSER MICROPHONE

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User Manual

A50-28033-00001

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JUST LISTEN.

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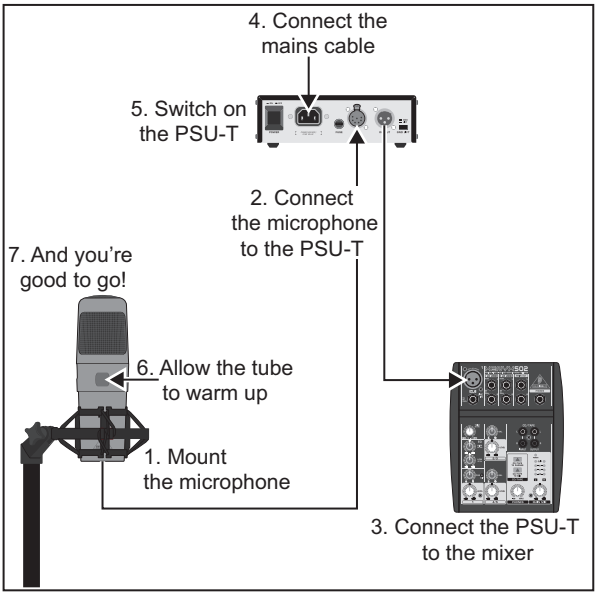
1. At a glance


4. Connect the mains cable
5. Switch on the PSU-T
2. Connect the microphone to the PSU-T
7. And you're good to go!
6. Allow the tube to warm up
1. Mount the microphone
3. Connect the PSU-T to the mixer

2. Safety precautions

Please read all safety precautions and operating instructions before attempting to operate the unit. Keep all safety precautions and operating instructions for future reference.

Mechanical interferences:

Always keep in mind that the contained tube is a highly sensitive component. Avoid impact and other mechanical interferences. BEHRINGER assumes no liability for any damage caused by the user. If possible, keep a spare tube of the same type (12AX7) at hand.

Water and moisture:

The T-1 is extremely sensitive to moisture. Both the microphone and the PSU-T power supply should not be used near water (for example, near

a bathtub, washing machine, swimming pool,etc.). When doing voice recordings, always use the enclosed windscreen to protect the capsule from moisture.

PSU-T power supply:

To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside.

Do not defeat the safety purpose of the polarized or grounding-type plug.

You should only connect the T-1 to the provided power supply.

Service and care:

After each use, wipe the microphone down with a soft cloth and place it back into its protective casing (included with the microphone).

3. Control elements and connections

3.1 Microphone

You can tell that the T-1 is switched on when the small window glows red.

It is also possible to activate an attenuation of −20 dB on the side of the T-1, for example, when signal sources are very loud.

There is an XLR connector on the bottom end of the microphone. Connect it to the power supply (PSU-T).

3.2 Power supply

The included BEHRINGER PSU-T not only provides the supply voltage for the tube preamplifier but also employs a circuit that reduces the low frequency response. This is activated on the front panel with the *LOW CUT* switch.

The *POWER* switch on the unit's rear panel turns on the power supply.

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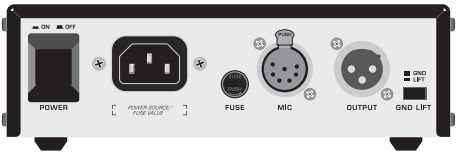

Here you also find the following:

- a seven-pin XLR connector to connect to the T-1 (*MIC*),
- a three-pin XLR connector to transmit the signal (*OUTPUT*),
- a switch to suppress signal humming noise (*GND LIFT*),
- an *IEC* power receptacle
- and a fuse holder.

☞ **Use the provided cable to connect the T-1 to the power supply unit!**

4. Set-up

Mounting the microphone

The microphone comes with an elastic shockmount. The advantage to a conventional microphone stand mount is that mechanically induced noise is virtually absorbed.

To mount the microphone, attach the shockmount to the microphone stand and, from above, slide the T-1 into the shockmount.

Caution

☞ **The provided shockmount is not intended to be used for *suspending* the T-1!**

Alternatively, you can also mount the T-1 on a microphone stand mount. There is a screw adapter on the bottom side of the microphone.

Warming up

The T-1 can basically be used a couple of seconds after the PSU-T has been switched on. However, the typical sound of the the T-1 only unfolds a while after activating the power supply. We recommend allowing the microphone to “warm up” 30 minutes before use.

Level setting / adjusting the basic sound

Adjust the gain control in the microphone channel of your mixing console so that the peak LED lights up only occasionally or never at all. The EQ

controls in the microphone channel should be set to mid-travel position to start with; low-cut filter and signal level attenuation should be switched off. To get the sound you want, try changing the mic position relative to the sound source or even move the microphone around in the recording room of your studio. Adjusting the angle at which walls face the sound source can also be helpful. Only when the desired basic sound has been achieved, you should start to use equalizers and signal processors, if any at all. Remember: less is often more!

5. Directivity

Your T-1 features a capsule with a cardioid pickup pattern and is ideal for recording individual instruments, vocals and speech. Cardioid pickup pattern means that the sound produced by sources located in front of the mic is strongly picked up. It is often used in recording situations, since this directivity pattern tones down the pickup of sounds located to the back of the microphone.

To place the microphone correctly, the BEHRINGER logo needs to face the sound source being recorded.

6. Audio connection

To transmit a preamplified signal (*OUTPUT* connector on the PSU-T), use a balanced microphone cable with the following pin assignment: pin 1 = shielding; pin 2 = +; pin 3 = -. Since your PSU-T features gold-plated contact points, we recommend that you use only microphone cables with gold-plated connectors.

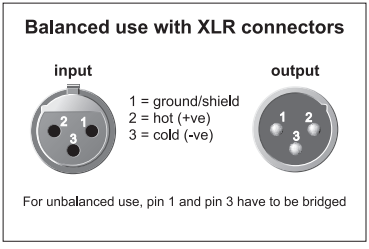

Fig. 6.1: XLR connectors

7. Warranty

Find our terms of warranty at http://www.behringer.com.

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8. Specifications

Transducer type	condenser, 16 mm (0.63")
Polar pattern	cardioid
Preamplifier	vacuum tube (12AX7)
Output (PSU-T)	gold-plated balanced XLR connector
Open circuit sensitivity	-40 dBV (0 dBV = 1 V/Pa)
Frequency response	20 Hz to 20 kHz
Level attenuation	-20 dB, switchable
Low-cut filter	12 dB/oct. @ 100 Hz (switchable)
Max. SPL (3 % THD @ 1 kHz)	130 dB
Dynamic range	110 dB
Nominal impedance	approx. 200 Ω
Load impedance	>1 kΩ
Supply voltage	adapter BEHRINGER PSU-T
MAINS VOLTAGE / FUSE	
100-120 V~, 50/60 Hz	T 250 mA H 250 V
220-230 V~, 50/60 Hz	T 125 mA H 250 V
Mains connector	standard IEC receptacle
Dimensions	Ø shaft: 2.7", length: 8.3" (Ø shaft: 68 mm, length: 211 mm)
Weight (net)	approx. 1.7 lb. (approx. 0.77 kg)

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Hanns-Martin-Schleyer-Str. 36-38, 47877 Willich-Muenchheide II, Germany. Tel. +49 2154 9206 0,
Fax +49 2154 9206 4903